

VZCZCXRO9646

RR RUEHBZ RUEH DU RUEHGI RUEHJO RUEHMA RUEHMR RUEHPA RUEHRN RUEHTRO  
DE RUEHSA #2733/01 3531350  
ZNR UUUUU ZZH  
R 181350Z DEC 08  
FM AMEMBASSY PRETORIA  
TO RUEHC/SECSTATE WASHDC 6772  
INFO RUCPDC/DEPT OF COMMERCE WASHDC  
RHEBAAA/DEPT OF ENERGY WASHINGTON DC  
RUEHC/DEPT OF LABOR WASHDC  
RUEHBJ/AMEMBASSY BEIJING 0901  
RUEHBY/AMEMBASSY CANBERRA 0782  
RUEHPE/AMEMBASSY LIMA 0214  
RUEHLO/AMEMBASSY LONDON 1661  
RUEHMO/AMEMBASSY MOSCOW 0912  
RUEHNE/AMEMBASSY NEW DELHI 0517  
RUEHFR/AMEMBASSY PARIS 1493  
RUEHOT/AMEMBASSY OTTAWA 0743  
RUEHSG/AMEMBASSY SANTIAGO 0219  
RUCNSAD/SOUTHERN AF DEVELOPMENT COMMUNITY COLLECTIVE  
RUEHZO/AFRICAN UNION COLLECTIVE

UNCLAS SECTION 01 OF 03 PRETORIA 002733

SIPDIS  
SENSITIVE

STATE PLEASE PASS USAID  
STATE PLEASE PASS USGS  
DEPT FOR AF/S, EEB/ESC AND CBA  
DOE FOR SPERL AND PERSON  
DOC FOR ITA/DIEMOND

E.O. 12958: N/A

TAGS: [EMIN](#) [EPET](#) [ENRG](#) [EINV](#) [ETRD](#) [ELTN](#) [SENV](#) [SF](#)

SUBJECT: HOTAZEL MANGANESE - BIG RESERVES BUT GLOOMY OUTLOOK

REF: A) Pretoria 2586  
B) Pretoria 2250  
C) Pretoria 386

1. (SBU) SUMMARY: South Africa's Northern Cape Province possesses significant iron ore (septel) and a remarkable 80 percent of the world's manganese reserves. Like iron ore, manganese is a necessary input to steel-making, but it is used in small quantities, making it vulnerable to the current global commodity and steel gloom. BHP-Billiton's Hotazel underground and open pit mines represent a significant portion of South Africa's manganese production and reserves. The company recently announced a 10-20 percent production cut because of the global steel slow-down. End Summary.

-----  
Black Rock  
-----

2. (SBU) Minerals/Energy Officer and Specialist visited the Wessels underground and Mamatwan open-pit manganese mines at Hotazel in South Africa's mineral-rich Northern Cape Province in the southern part of the Kalahari region on December 4. The name Hotazel does in fact derive from an early European settler taking note of the extreme summer heat. BHP-Billiton operates both mines, as well as some associated smelters, on behalf of the Samancor joint venture with partner Anglo American (40 percent). South Africa holds some 80 percent of the world's economic-grade manganese resources (over four billion tons of ore) and is the second-biggest producer and exporter of ferro-manganese metal and manganese ore. China is the number one producer of manganese ore (for domestic consumption) and Australia is the number one exporter.

3. (SBU) Early settlers immediately took note of the numerous black rock outcrops in the region which proved to have mineral value. The Wessels and Mamatwan mines lie at opposite ends of a remarkable 45 by 15 kilometer manganese ore body, the largest in the world. The body deepens from surface outcrops at Mamatwan, justifying open-pit mining, to a depth of 350 meters at Wessels, where underground mining is used. Manganese is a desulfurizing and deoxidizing agent in steel-making, but contributes only 1.5 percent of the ingredients in steel. Manganese is also used for dry cell batteries,

fertilizer, water purification, and gasoline additives, but - again - only in relatively small quantities. Hotazel mine production is conveyed by state rail company Transnet to the port of Port Elizabeth via trains consisting of up to 104 63-ton wagons.

-----  
Wessels Underground  
-----

14. (SBU) Wessels Mine Managers Louis Alberts and Wally Klaussen and contractor Murray and Roberts Senior Executive Caswell Makama took Embassy Officers underground to see a new development area at the mine. Wessels has current manganese ore production of 1 million tons per year, with a goal to increase production to 1.5 million tons over the next few years. Mine production is based on standard "board and pillar" development, using drilling and blasting. The mine carries out basic beneficiation of crushing, screening, and washing. Wessels' quality control assures blending of six specific product types sought by their customers. The mine's biggest challenge is keeping the product lines separate in mining, processing, and transport. Wessels' silicified manganese is known for its hardness, which is advantageous in the blast furnace. Wessels has an arrangement with local BEE partner Ntsimbintle to mine adjacent areas using Wessels' underground access.

-----  
Mamatwan Open-cut Pit  
-----

15. (SBU) Mamatwan General Manager Koos Janse van Vuuren and his  
PRETORIA 00002733 002 OF 003

team showed off this mine's "well managed" open pit to Embassy Officers, including witnessing a prodigious blast that made the seasoned Minerals Officer and Specialist flinch (100 tons of explosives removed 300,000 tons of rock). Mamatwan's capacity is 2.8 million tons of manganese ore per year. The pit manager described in detail the level of management that goes into planning, drilling, blasting, and wall engineering to assure efficient exploitation of the resource. He said the Mamatwan pit was small compared to the neighboring gigantic Sishen pit (septel), but claimed that Sishen's pit reflected hurried exploitation, rather than careful planning and execution. Manganese beneficiation consists of primary, secondary, and tertiary crushing with associated screening plants. There is a dense medium separator and a sinter plant with a capacity of 0.9 million tons per year of sinter. The sinter agglomerates fine ore into a more valuable, hard product suitable for blast furnaces.

16. (SBU) The Hotazel mines sell about 80 percent of production as ore, mostly for export, and use the balance as feedstock in Samancor smelters in South Africa. Samancor aims to offer a specific mix of high-grade ore and smelter products to meet customer needs. Samancor Manganese owns the Advalloy smelter at Meyerton in Gauteng, which processes a portion of the Hotazel output to produce 82,000 tons of medium-carbon ferromanganese in various fractions per year. Also in Meyerton, Samancor's Metalloys produces 370,000 tons of high-carbon ferromanganese and 120,000 tons of silicomanganese in various fractions per year. Samancor is the co-owner of the Manganese Metal Company smelter at Nelspruit in Mpumalanga, which produces 27,000 tons of electrolytic manganese metal per year.

-----  
Global Gloom Catches up to Hotazel  
-----

17. (SBU) At around the same time as the Embassy visit, BHP-Billiton announced that -- due to weak market conditions -- it was temporarily reducing manganese production at Hotazel in the Northern Cape. (Note: On the day of the visit, management recognized the challenge of the depressed steel market in China and elsewhere, but they were stoic and did not mention the BHP-Billiton announcement. They optimistically posited that the market would rebound in six months. End Note.) The announced cuts in output will be balanced between GEMCO in Australia and Hotazel and will reduce total ore

production by 21 percent (1.5 million tons) in 2009. BHP-Billiton's current total annual manganese ore output capacity is 7.0 million tons. The company expects to reduce alloy production at its ferro-manganese plants at TEMCO (Australia) and Metalloys (South Africa) by 170,000 tons from a current output capacity of 725,000 tons. Furnace re-builds will be brought forward at both facilities, and certain furnaces will not be re-started until market conditions Qand certain furnaces will not be re-started until market conditions improve.

¶18. (SBU) This turn of events contrasts markedly with that prevailing in the earlier part of the year when record output was achieved from these same mines. BHP-Billiton increased its manganese production in the quarter ended September 30 to 1,830,000 tons of manganese-metal-equivalent, which was a 27 percent increase over the same quarter in 2007, despite using 10 percent less power. Manganese alloy production was also up 10 percent at 203,000 tons in the same quarter in 2008, compared to the same quarter in 2007. This was described as the "payback" on BHP Manganese President Peter Beaven's investment of \$100 million to expand the Hotazel mines and to import large diesel generator sets to boost power supply. BHP-Billiton is also expanding its cogeneration manganese alloy facility south of Johannesburg. Beaven said he expected volatility and uncertainty to continue in the short term, but was confident that the ongoing industrialization and urbanization of China would continue to drive longer-term demand for manganese.

¶19. (SBU) Competing producers in the same Kalahari region are a worry in the currently depressed manganese market. Assmong, 50

PRETORIA 00002733 003 OF 003

percent held by African Rainbow Minerals and Assore, is the other significant manganese producer (also for iron ore as Khumani, near Sishen) and smelter in the area. Renova of Russia controls the joint venture company United Manganese of Kalahari which is developing a nearby manganese mine, smelter, and associated infrastructure. Russia's largest steel maker, Evraz, is the majority share-holder of one of South Africa's largest steel makers, Highveld Steel & Vanadium. Both Highveld and ArcelorMittal SA have announced steel production cuts, comparable to global slow-downs. A number of ferro- and manganese alloy smelters in South Africa, including Samancor, have also announced significant cuts.

¶10. (SBU) COMMENT: The mineral wealth in this corner of the southern Kalahari is remarkable. No one could offer a geological explanation for the mineral endowment, particularly why 80 percent of the world's economic-grade manganese is located close to the surface there. The challenge of manganese is that it is a critical -- but small -- ingredient in steel-making. There is no way that South Africa's upstream mining or downstream beneficiation could escape the Chinese and global steel slow-down. The length of the downturn will determine whether the manganese mines have to resort to significant retrenchment of employment. Russian investment in the same region may contribute to additional manganese over-supply to the market. End Comment.

BOST